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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/399,065	09/18/1999	JEREMY A. KENYON	41018.P004	1823

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COLUMBIA IP LAW GROUP, PC
10260 SW GREENBURG ROAD
SUITE 820
PORTLAND, OR 97223

EXAMINER
NAJJAR, SALEH

ART UNIT	PAPER NUMBER
2154	15

DATE MAILED: 03/01/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/399,065	KENYON ET AL.	
	Examiner	Art Unit	
	Saleh Najjar	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 February 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

1. This action is responsive to the request for continued prosecution application filed on February 11, 2002. Claims 1-38 are pending examination. Claims 1-38 represent a method and system directed toward dynamic scalable multi-media content streaming.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CAR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-10, 12-21, and 23-34 are rejected under 35 U.S.C. 102(e) as being anticipated by Tso et al., U.S. Patent No. 6,185,625.

Tso teaches the invention as claimed including a scaling proxy server sending to the client a graphical user interface for establishing object encoding preferences after receiving the client request for the object (see abstract).

As to claim 1, Tso teaches a client computer system including a method of operation comprising:

determining operating characteristic value(s) for at least one operating characteristic of the client computer system (see col. 6, lines 25-45, Tso teaches determining the client characteristics including CPU and bandwidth capability); and

adaptively requesting streaming of model data from a remote content providing server, based at least in part on the determined operating characteristic value(s) of the

at least one operating characteristic of the client computer system (see figs. 1-10; col. 9-12, Tso teaches the claimed step of making a first request for a certain object and then making a second different request for a certain object based on the characteristics of the client).

As to claim 2, Tso teaches a client computer system including a method of operation as in claim 1 above, wherein the at least one operating characteristic comprises one or more operating characteristics selected from a group consisting of communication bandwidth, processor power, availability of memory, availability of swap space, memory and bus speed, availability of video memory, availability of digital signal processing for audio decompression, and availability of graphics acceleration (see col. 6).

As to claim 3, Tso teaches a client computer system including a method of operation as in claim 1 above, wherein said determining is performed as an integral part of an installation of a multi-media content player, and said adaptively requesting streaming of model data is performed by said multi-media content player (see col. 11, Tso teaches that a client may be enabled by an applet downloaded to the client to make requests for content based in the determined characteristics of the client).

As to claim 4, Tso teaches a client computer system including a method of operation as in claim 1 above, wherein said model data comprise of data selected from a group consisting of geometry data, lighting data, coloring data, texturing data, animation data, and audio data (see col. 19).

As to claim 5, Tso teaches a client computer system including a method of operation as in claim 1 above, wherein said adaptively requesting of streaming of model data comprises adaptively requesting the remote content providing server for different versions of the model data based at least in part on the determined operating characteristic value(s) of the at least one operating characteristic of the client computer system (see col. 15, Tso teaches that different versions of the object is returned based in client capability).

As to claim 6, Tso teaches a client computer system including a method of operation as in claim 1 above, wherein the method further comprises monitoring at least one performance indicator for the client computer system (see col. 6).

As to claim 7, Tso teaches a client computer system including a method of operation as in claim 6 above, wherein said at least one performance indicator comprises one or more selected from a group consisting of bandwidth utilization, CPU utilization, memory utilization, memory swapping, cache hit rate, and audio frames drop rate (see col. 6).

As to claims 8-9, Tso teaches a client computer system including a method of operation as in claim 6 above, wherein said adaptively requesting of streaming of model data comprises switching to requesting the remote content providing server for higher or lower precision versions of the model data, responsive to indicator values of the monitored at least one performance indicator (see col. 14-19, Tso teaches that a higher or lower versions of the scaled object is returned based in the client characteristics).

As to claim 10, Tso teaches a client computer system including a method of operation as in claim 1 above, wherein the method further comprises automatically synchronizing rendering of the received model data in accordance with the timeliness of the receipt of the model data (see col. 13-19).

Claims 12-21 do not teach or define any new limitations above claims 1-10 and therefore are rejected for similar reasons.

As to claim 23, Tso teaches a computer server including a method of operation comprising:

storing multiple versions of model data tailored for different operating environments differentiated in accordance with values of at least one operating characteristic of a remote requesting client computer system (see figs. 1-10; col. 6-13, Tso teaches that different versions of the object data are stored at the proxy server);

accepting requests for said model data that includes version selection

designations from the remote requesting client computer system (see col. 13-19); and

streaming the requested versions of the model data to the remote requesting client computer system, responsive to the accepted requests (see col. 12-19).

Claims 24-34 do not teach or define any new limitations above claims 1-10, 12-21, and 23 and therefore are rejected for similar reasons.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 11, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tso et al..

Tso teaches the invention substantially as claimed including a scaling proxy server sending to the client a graphical user interface for establishing object encoding preferences after receiving the client request for the object (see abstract).

As to claim 11, Tso teaches a client computer system including a method of operation as in claim 10 above.

Tso fails teach the limitation wherein said automatic synchronization of rendering of the received model data comprises dropping audio data in proportional to the amount of the time the audio data arrived late.

Official Notice is taken that the concept and advantages of dropping audio data frames that arrived too late with respect to its sequence is old and well known in the data communication art. It would have been obvious to one of ordinary skill in the art to apply the concept of dropping audio data frames in Tso to allow efficient synchronization of downloaded multimedia presentations.

Claim 22 does not teach or define any new limitations above claim 11 and

therefore is rejected for similar reasons.

6. Claims 35-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tso et al., in view of Britton et al., U.S. Patent No. 6,279,030.

Tso teaches the invention substantially as claimed including a scaling proxy server sending to the client a graphical user interface for establishing object encoding preferences after receiving the client request for the object (see abstract).

As to claim 35, Tso teaches a client computer system including a method of operation as in claim 1 above.

Tso fails to teach the claimed limitation of "determining a single composite operating characteristic value based on the determined operating characteristic values of the at least one operating characteristic".

However, Britton teaches a method and system where multiple versions of a program component are available and a specific version is dynamically selected for downloading based on current attribute values that may represent the user's, current working environment, connection type, status, preferences, etc (see abstract). Britton teaches "determining a single composite operating characteristic value based on the determined operating characteristic values of the at least one operating characteristic" (see figs. 4-7; col. 10-11; col. 12, lines 25-40, Britton teaches that a set of currently applicable attribute values representing hardware and or software of the client is inserted in the client request. The component server compares the attributes from the request to the predicate records, the component reference from this predicate record is used to retrieve the selected version of software components to download to the client).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Tso in view of Britton so that a predicate record is defined for a set of attributes/client characteristics for each version of software component. One would be motivated to do so to specify a correspondence between specific values of attributes/client characteristics and which version of data should be selected.

As to claim 36, Tso teaches a client computer system including a method of operation as in claim 35 above.

Tso fails to teach the claimed limitation of "wherein said determining comprises computing a weighted index that weighs relative importance of said at least one operating characteristic".

However, Britton teaches a method and system where multiple versions of a program component are available and a specific version is dynamically selected for downloading based on current attribute values that may represent the user's, current working environment, connection type, status, preferences, etc (see abstract). Britton teaches "wherein said determining comprises computing a weighted index that weighs relative importance of said at least one operating characteristic" (see figs. 4-7; col. 10, lines 1-30, Britton teaches that when multiple predicates representing different combinations of a set of attributes are specified in a predicate record, the principles of Boolean logic are applied to the set of attributes/predicates to determine if that predicate record which points to a specific version of a software component is satisfied).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Tso in view of Britton so that decision logic is applied to the set of attributes/predicates to determine if that predicate record which points to a specific version of a software component is satisfied. One would be motivated to do so to specify a correspondence between specific values of attributes/client characteristics and which version of data should be selected.

Claims 37-38 do not teach or define any new limitations above claims 35-36 and therefore are rejected for similar reasons.

7. Applicant's arguments with respect to claims 1-38 have been considered but are moot in view of the new ground(s) of rejection.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Software based encoder for scalable video deliver by Chaddha et al., U.S.

Patent No. 5,621,660.

- Custom localized information for display to a client over a network by Chaddha, U.S. Patent No. 6,122,658.
- Multicast communication system for joining different multicast groups by Tomoda et al., U.S. Patent No. 5,832,229.
- Distributed transmission of real time multimedia information by Chaddha et al., U.S. Patent No. 6,151,632.
- Multimedia content delivery over a network by Kim et al., U.S. Patent No. 6,219,7004.
- Client optimized data transmission by Uemura et al., U.S. Patent No. 6,243,392.
- System for collecting and displaying performance improvement for a computer by Tso et al., U.S. Patent No. 6,247,050.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saleh Najjar whose telephone number is (703) 308-7613. The examiner can normally be reached on Monday-Friday from 6:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, AN MENG AI, can be reached on (703) 305-9678. The fax phone number for this Group is (703) 308-9052.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-9600. The fax number for the After-Final correspondence/amendment is (703) 746-7238. The fax number for official correspondence/amendment is (703) 746-7239. The fax number for Non-official draft correspondence/amendment is (703) 746-7240.

Saleh Najjar
Examiner Art Unit 2154